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OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION

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VBPA

Veterinary Services Market for Companion Animals

Cat owners and their use of veterinary services

This is the third of 5 synopses covering the recently completed study of the US veterinary services market for companion animals.[1] This article summarizes findings on cat ownership in the United States. Also, cat-owning households' use of and expenditures for veterinary services are noted.

Cat ownership statistics

In the survey of 29,535 nationally representative households, 30.5% (9,019) reported owning one or more cats on Dec 31, 1987. Households with multiple cats were common, with 42.6% owning 2 or more cats, and these households accounted for 70.2% of all cats. Because there were many multiple-cat households, the mean number of cats owned was 2. When survey findings are projected to the population of US households at the end of 1987, the estimated number of households owning cats on Dec 31, 1987, was 27.7 million, and the population of cats was 54.6 million.

From a regional standpoint, cat ownership was considerably higher in the western region, where 35.8% of households owned a cat (Table 1). In comparison, cat ownership in the north-central region was the lowest (27.0%).

Cat owners provided information about their cats' age brackets, and the most common age bracket was 2 to 5 years; 43% of cats owned were in this bracket. Another 28% were in the ≤1-year-old bracket, and 29% were in the ≥6-year-old bracket. In addition, cat owners were likely to own another species of companion animal. For example, 50% of cat owners reported that they owned a dog, 10% owned a pet bird, and 6% owned a horse.

The percentage of US households owning cats has increased from 28.4% in 1983 to 30.5% at the end of 1987. Other evidence indicates that this growth is part of a long-term trend going back to at least the mid-1970s. For example, researchers with Ralston Purina Company have published survey data on cat ownership dating back to 1975.[2] Reanalysis of those data shows that 21.5% of US households had owned a cat during a 12-month period in 1974 and 1975, and the average number of cats owned was 1.6. In view of current data, there has been a marked increase in the percentage of households owning cats and the average number of cats owned.

Demographic profile of cat owners

In the article on dog owners,[3] it was pointed out that 4 variables were important for differentiating dog-owning households from those that did not own a companion animal: (1) household income, (2) family size, (3) home ownership, and (4) city population. These demographic variables also were related to cat ownership, as shown in Table 2. For

Table 1—Percentage of cat-owning households, by US region

US Region*	No. households surveyed	No. (%) cat-owning households†	Margin of error (%)‡
Northeast	6,378	1,895 (29.7)	±1.1
North Central	7,602	2,056 (27.0)	±1.0
South	9,851	3,024 (30.7)	±0.9
West	5,704	2,044 (35.8)	±1.2
Total	29,535	9,019 (30.5)	±0.5

*Regional designations are the same as those used by US Census Bureau. †Number of cat-owning households includes only those that owned one or more cats on Dec 31, 1987. ‡Margin of error determined with 95% confidence interval.

Table 2—Comparison of selected demographic profiles for cat-owning households with households not owning companion animals

Variable	Category	Cat-owning households (%)	Households not owning a companion animal (%)	Difference*
Household income	<$20,000	34	43	−9
	$20,000 to $29,999	18	18	0
	≥$30,000	48	39	+9
Family size	One person	16	37	−21
	Two people	30	36	−6
	Three people	21	12	+9
	Four or more people	33	15	+18
Home ownership	Own/buying	76	68	+8
	Renting	24	32	−8
City population	<50,000	33	24	+9
	50,000 to 1.9 million	37	39	−2
	≥2 million	30	37	−7

*Difference column shows the result of subtracting the percentage for households not owning a companion animal from the corresponding percentage for cat owners. The differences give an indication of the relative effect of the variable, with larger category differences indicating a greater effect. If a variable had no effect, all category differences would equal zero. The base for calculating percentages is 9,019 for cat-owning households and 12,176 for households not owning a companion animal.

Prepared by C. Michael Troutman, PhD, Charles, Charles Research Group, Overland Park, Kan. Third in a series of 5 synopses from the entire report, which became available Sept 15 (*see JAVMA*, Oct 1, 1988, p 765).

Table 3—Comparison of family life stage profiles for cat-owning households with households not owning companion animals

Family life stage	Household description	Cat-owning households (%)	Households not owning a companion animal (%)	Difference
Young single	One-member household, <35 years old	5	8	−3
Middle-aged single	One-member household, 35 to 65 years old	7	15	−8
Older single	One-member household, >65 years old	4	14	−10
Young couple	Two members, <45 years old, no children	10	6	+4
Middle-aged couple	Two members, >45 years old, no children	10	12	−2
Retired older couple	Two retirees, >45 years old, no children	7	17	−10
Young parent	Families with children <6 years old, adults <45 years old	17	11	+6
Middle-aged parent	Families with children >6 years old, adults <45 years old	18	6	+12
Older parent	Families with children at home, adults >45 years old	20	10	+10
Other*		2	1	

*"Other" refers to individuals living with a roommate. The base for calculating percentages is 9,019 for cat-owning households and 12,176 for households not owning a companion animal.

example, the percentage of cat-owning households with annual incomes of $30,000 or more is considerably greater than the corresponding percentage for non-owners, which indicates that cat-owning households had higher annual incomes. Similarly, cat ownership increased as family size increased. Moreover, cat owners tended to own their own home and to live in cities with small populations.

Another way to compare cat-owning with non-cat-owning households is on the basis of family life stage (Table 3), based on family size, age of head(s) of household, and presence of children. For example, there are 3 single life stages (young, middle-aged, and older), and the percentages of cat-owning households in these 3 groups are less than the corresponding percentages for households not owning a companion animal. However, the difference is less for young singles than for middle-aged or older singles, which indicates that cat ownership was less common among the latter 2 groups. The same trend is evident for the 3 couple life stages (young, middle-aged, and retired).

In the 3 parent life stages (young, middle-aged, and older), however, the trend is just the opposite. Here, the likelihood of cat ownership increased from young to older parents. Even more important is the fact that cat ownership was more common for all 3 groups of parents. On a combined basis, 55% of cat-owning households have children. These findings resemble those for dog-owning households, and they underscore the important relationship between pet ownership and presence of children in the household.

Table 4—Use of veterinary services by households owning one, two, three, or four cats

	All cat-owning households*	No. of cats owned				
		1	2	3	4	≥5
Percentage of households that had cat seen by veterinarian	59.5	57.2	67.7	63.9	59.8	43.7
Mean number of veterinary visits per cat-owning households	1.6	1.1	2.0	2.6	2.8	2.3
Mean number of veterinary visits per cat	0.8	1.1	1.0	0.9	0.7	0.3
Base†	9,019	5,335	2,278	826	388	701

*Percentage based on a sample of 9,528 households that owned a cat anytime in 1987. †The base in each column is the sample size used in calculating percentage and means for the respective groups.

Use of veterinary services

Regarding cat owners' use of veterinary services during 1987 (Table 4), 59.5% had a cat seen by a veterinarian. Comparable percentages are shown for subgroups based on number of cats owned. Among subgroups, the percentages that obtained care were generally well above 50%, except for households with ≥5 cats, where the percentage was 43.7%.

Further, the mean number of veterinary visits per household was 1.6, and the mean number of visits per cat was 0.8. Across subgroups, the mean number of visits per household increased with the increase in number of cats owned; however, visits per household dropped to 2.3 for those with ≥5 cats. On a per-cat basis, visits decreased slightly with the increase in number of cats owned, although a sharp decline appears for those with ≥5 cats.

Notwithstanding those who owned ≥5 cats, results indicate that most owners had each cat seen by a veterinarian about once a year. This reflects an overall increase in cat owners' use of veterinary services.[1] Despite this increase, cats receive substantially less veterinary care than dogs. On a per-pet basis, the mean number of annual veterinary visits was 1.5/dog vs 0.8/cat. This is also the pattern in households with both a dog and a cat, and this suggests that many owners believe cats need less veterinary care than dogs.

Cat owner expenditures for veterinary services and products were estimated by analyzing households that owned only cats during 1987. These results were projected to all cat-owning households, based on the average cost of a feline veterinary visit. To illustrate, cat-exclusive households spent an average of $63.83 on veterinary services, and they had their cats examined 1.9 times during the year. Therefore, the average cost per veterinary visit was

$33.59. Given the estimated number of cat-owning households and the mean number of feline veterinary visits per household, estimated expenditures for feline veterinary care were $1.573 billion in 1987.

Conclusions and implications

Cat ownership has become increasingly popular. The percentage of households owning cats has increased dramatically since the mid-1970s. Further, the average number of cats owned has increased in this time.

In many respects, cat-owning households resemble dog-owning households. Like dog owners, for instance, cat owners tend to have higher incomes and larger families, compared with households without a pet. Also, there is a correlation between cat ownership and the presence of children in the household. One reason is the overlap in dog and cat ownership; 50% of cat owners also owned a dog in 1987.

Although most cat owners appear to obtain annual veterinary care, 40% of cat owners did not have their cats examined in 1987. Those who do not obtain annual veterinary care represent an opportunity for increasing pet owner demand for veterinary services. If one third of this 40% group had obtained feline veterinary care in 1987, for example, demand for feline veterinary care would have approached the level of demand for canine care. Therefore, a continuing marketing goal should be to encourage more regular use of veterinary services by cat owners.

1. Charles, Charles Research Group, The veterinary services market for companion animals. Schaumburg, Ill: American Veterinary Medical Association, 1988 (in press).
2. Lawler DF, Sjolin DW, Collins JE. Incidence rates of feline lower urinary tract disease in the United States. *Feline Pract* 1985;15:13–16.
3. Troutman CM. Dog owners and their use of veterinary services. *J Am Vet Med Assoc* 1988;193:1056–1058.

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Economic Note

Employment, starting salaries, and educational indebtedness of 1988 graduates of US veterinary medical colleges

In cooperation with US colleges of veterinary medicine, the AVMA conducted its annual survey of the graduating classes of veterinary medicine in spring 1988. The primary purpose of the survey was to secure data on veterinary graduates' employment, salaries, and educational indebtedness. Of the 2,223 US graduates, 1,472 responded to the survey, a response rate of 66%.

Employment and income

At the time of the survey, 85% of the responding graduates had received at least one employment offer. Of those graduates receiving offers, 35% had received 1 offer, 26% had received 2 offers, and 39% had received 3 or more offers. At the time of the survey, 69% of the graduates had accepted positions for employment upon graduation.

Regarding the graduates who had accepted employment, 75% had accepted positions as employees in private practice (Tables 1 and 2). Mean starting salaries are reported for 828 graduates who indicated annual starting salaries for full-time employment. For graduates taking positions as employees in private practice, the mean starting salary was $23,079. This represents a 4.2% increase over the 1987 starting salary of $22,152 for private practice employees.[1]

Specifically, 37.7% entered small animal exclusive practice at a mean annual salary of $23,550, up 3.8% from 1987; 9.3% entered small animal predominant practice at a mean annual salary of $22,598, up 4.5% from 1987. Also, 14.5% entered mixed animal practice at a mean annual salary of $22,279, up 5.9%. Only 3.0% of graduates entered equine practice, and the mean starting salary was $21,269, down 2.9%. In the livestock sector, 1.9% and 8.4% of graduates entered large animal exclusive and large animal predominant practice, respectively. In large animal exclusive and large animal predominant practice, starting salaries were $24,488, up 3.9%, and $23,214, up 12.0%, respectively. An additional 4.8% of the respondents reported they would be self-employed in private practice, with an expected mean income of $23,690.

Prepared by J. Karl Wise, PhD, Wisemark Associates, PO Box 681189, Schaumburg, IL 60168-1189.

Table 1—Types of employment and starting incomes of a large sample of 1988 US veterinary medical college graduates

	Percentage of graduates	Mean starting salary (No.)	Mean additional compensation expected in first year (No.)
Large animal exclusive	1.9	$24,488 (17)	$3,409 (11)
Large animal predominant	8.4	$23,214 (74)	$3,926 (40)
Mixed animal	14.5	$22,279 (123)	$3,073 (70)
Small animal predominant	9.3	$22,598 (80)	$2,883 (53)
Small animal exclusive	37.7	$23,550 (319)	$3,416 (182)
Equine predominant	3.0	$21,269 (26)	$6,250 (16)
University	2.1	$17,700 (14)	$2,950 (4)
Federal government*	...	... ...	... ...
Military service†	1.3	$33,372 (11)	$4,050 (4)
State/local government	0.1	$27,914 (1)	... ...
Industry/commercial	0.7	$35,166 (6)	$3,333 (3)
Advanced study	15.1	$15,766 (119)	$4,063 (23)
Self-employed	4.8	$23,690 (31)	$5,127 (18)
Other	1.0	$21,942 (7)	$4,500 (4)
	100 (894)‡	$22,181 (828)	$3,565 (428)

*Starting salary for federal government employment of veterinarians with no experience, no advanced degree other than the DVM, and not in the top 25% of their class was $22,907 (GS 9, step 1). †Starting salary for military employment for veterinarians who are single, with no prior military service, including base pay, subsistence and quarters allowance, and veterinary special pay was $27,456. ‡Of the 894 graduates reporting employment, 828 reported their annual starting salary for full-time employment.

Table 2—1988 Starting salaries of 828 US veterinary medical college graduates, by type of employment

Starting salaries	LAE	LAP	MA	SAP	SAE	EP	U	FG	MS	SLG	IC	AS	SE	Other	Total
$11,000 or less	...	3	2	2	3	1	2	...	...	...	...	5	...	...	18
$11,001 to $13,000	...	...	...	1	1	...	2	...	...	...	...	9	1	...	14
$13,001 to $15,000	1	...	2	1	2	2	...	...	...	...	...	38	...	1	47
$15,001 to $17,000	...	...	2	...	2	1	3	...	...	...	...	41	1	...	50
$17,001 to $19,000	...	3	5	4	14	4	3	...	...	...	1	12	1	...	47
$19,001 to $21,000	2	5	30	16	35	7	2	...	...	...	...	10	7	2	116
$21,001 to $23,000	1	17	36	20	93	1	1	...	...	...	...	1	3	1	174
$23,001 to $25,000	6	31	30	23	93	6	...	...	...	...	...	...	9	2	200
$25,001 to $27,000	3	9	11	4	37	1	...	...	...	...	...	3	4	...	72
$27,001 to $29,000	3	2	3	5	19	...	...	...	2	1	1	...	2	1	39
$29,001 to $31,000	1	3	2	3	17	2	...	...	3	...	1	...	2	...	34
$31,001 to $33,000	...	...	...	...	2	...	...	...	1	...	...	...	...	...	3
More than $33,000	...	1	...	1	1	1	1	...	5	...	3	...	1	...	14

LAE = large animal exclusive; LAP = large animal predominant; MA = mixed animal; SAP = small animal predominant; SAE = small animal exclusive; EP = equine predominant; U = university; FG = federal government; MS = military service; SLG = state/local government; IC = industrial/commercial; AS = advanced study; SE = self-employed.

As in 1987, less than 2% of the responding graduates accepted positions with the military service. The mean starting salary was $33,372. No respondents indicated employment with the federal government. One respondent entering state/local government reported a salary of $27,914. Six graduates entering the industry sector reported a mean salary of $35,166.

In the academic sector, 2.1% took university positions (research or teaching) at a mean salary of $17,700, and 15.1% would begin advanced study (graduate degree, internship, or residency program) at a mean salary of $15,766.

All graduates were asked if they would receive compensation in addition to their salary in their first year of employment. One half of the graduates who reported starting salaries indicated that they would receive additional compensation within the first year. Most likely, the additional pay represents a percentage of gross income, a percentage of emergency fees, a bonus, a salary raise, or other financial compensation. Most graduates anticipating additional pay expected amounts ranging from $3,000 to $5,000.

*Table 3—Educational debt of 1988 US veterinary medical college graduates**

Debt ($)	Relative frequency (%)	Cumulative frequency† (%)
0	16.7	100.0
1 to 5,000	7.9	83.3
5,001 to 10,000	7.0	75.4
10,001 to 15,000	7.9	68.4
15,001 to 20,000	11.0	60.5
20,001 to 25,000	12.6	49.5
25,001 to 30,000	11.8	36.9
30,001 to 35,000	7.2	25.1
35,001 to 40,000	7.0	17.9
40,001 to 45,000	3.4	10.9
45,001 to 50,000	2.7	7.5
More than 50,000	4.8	4.8

*Total respondents = 1,472. †Cumulative frequency percentages represent the percentage of graduates with debt in excess of the corresponding next lowest debt interval; eg, 60.5% of the graduates reported debt in excess of $15,000.

Educational debt

All graduates were requested to indicate what their total education indebtedness would be upon graduation. For the 1,226 graduates (83%) who indicated having educational debt, the mean debt was $25,753, up 4.4% from 1987. The relative frequency distribution showed that 60% of 1988 graduates, compared with 63% of 1987 graduates, had educational debt in excess of $15,000 (Table 3).[1] Mean educational debt also was determined by type of employment graduates accepted at the time of the survey (Table 4).

Reference

1. Wise JK. Employment, starting salaries, and educational indebtedness of 1987 graduates of US veterinary medical colleges. *J Am Vet Med Assoc* 1987;191:1489–1490.

Table 4—1988 Educational debt of 761 US veterinary medical college graduates, by type of employment

Debt ($)	LAE	LAP	MA	SAP	SAE	EP	U	FG	MS	SLG	IC	AS	SE	Other
1 to 5,000	1	7	15	5	24	4	2	...	1	...	...	13	4	...
5,001 to 10,000	3	5	8	7	25	1	2	...	2	...	...	9	3	1
10,001 to 15,000	...	11	10	3	27	2	2	...	1	...	...	16	2	1
15,001 to 20,000	1	9	16	9	41	1	3	...	2	...	2	8	6	1
20,001 to 25,000	2	12	13	14	38	10	2	...	1	...	1	20	1	1
25,001 to 30,000	4	9	16	12	48	1	...	...	2	...	1	12	4	...
30,001 to 35,000	2	4	13	6	23	1	1	...	1	...	...	4	8	...
35,001 to 40,000	2	6	8	2	21	2	1	...	...	...	...	11	3	2
40,001 to 45,000	...	4	6	2	11	...	1	...	2	1	...	5	...	...
45,001 to 50,000	...	2	2	4	7	...	...	...	...	...	...	5	...	2
More than 50,000	...	1	5	3	19	2	1	...	...	...	1	12	2	...
Total	15	70	112	67	284	24	15	...	12	1	5	115	33	8
Mean	$27,713	$23,371	$24,591	$25,391	$25,720	$24,895	$23,856	...	$22,233	$41,000	$36,700	$27,326	$24,889	$29,750

LAE = large animal exclusive; LAP = large animal predominant; MA = mixed animal; SAP = small animal predominant; SAE = small animal exclusive; EP = equine predominant; U = university; FG = federal government; MS = military service; SLG = state/local government; IC = industrial/commercial; AS = advanced study; SE = self-employed.